

Figure 9D is a catheter system with a cannula advanced into a vessel true lumen, under the embodiment of Figures 9AA-9AC.

Figure 9E is a catheter system following retraction of a re-entry element with the cannula maintained in the vessel true lumen, under the embodiment of Figures 9AA-9AC.

Figure 9F is a catheter system with a guide wire advanced into a vessel true lumen, under the embodiment of Figures 9AA-9AC.

Figure 10AA is a catheter system including a nosecone with an internal ramp to guide a specialized guide wire for re-entry, under an alternative embodiment of Figures 9AA-9AC and 9B.

Figure 10AB is a top view of the catheter system of Figure 10AA.

Figure 10AC is a front view of the catheter system of Figure 10AA.

Figure 10B is a catheter system including a nosecone, under the embodiment of Figures 10AA-10AC, showing a specialized guide wire deploying from the internal ramp.

Figure 10C is a catheter system including a nosecone, under the embodiment of Figures 10AA-10AC, showing a distal taper of the specialized guide wire deploying from the internal ramp.

Figure 10D is a catheter system including a nosecone, under the embodiment of Figures 10AA-10AC, showing the distal taper of the specialized guide wire repositioning from the internal ramp through the nosecone slot.

Figure 10E is a catheter system including a nosecone, under the embodiment of Figures 10AA-10AC, showing catheter removal from a treatment site following deployment of the specialized guide wire using the nosecone.

On page 13, replace the paragraph beginning on line 18 with the following substitute paragraph:

Figures 9AA-9AC are a catheter system including a nosecone 902 with an internal ramp 904 to guide an internal cannula element and a re-entry laser system, under an embodiment. The nosecone 902 also includes a guide wire distal exit port 906, and a cutout 908 to guide fluoroscopic alignment. A side view 912, top view 914 and front view 916 of the nosecone 902 are shown.



On page 14, replace the paragraph beginning on line 19 with the following substitute paragraph:

Figures 10AA-10AC are a catheter system including a nosecone 1002 with an internal ramp to guide a specialized guide wire for re-entry, under an alternative embodiment of Figures 9AA-9AC and 9B. The nosecone 1002 of this embodiment has a modified guide wire exit port 1006 to accommodate the specialized guide wire or a specialized cannula. Figures 10B-10E show deployment of the specialized guide wire.

On page 15, replace the paragraph beginning on line 18 with the following substitute paragraph:

Figure 12A is a catheter system 1200 including a nosecone 1202 with an internal ramp 1204 and an internal slidably disposed tube 1206, under an alternative embodiment of Figures 9AA-9AC, 9B, and 10AA-10E. The position of the internal tube 1206 is controllable to aid in steering a working element 1208 deployed via the catheter system 1200. When the internal tube 1206 is in this retracted position, the working element 1208 is deployed at a shallower deployment angle relative to a longitudinal axis of the catheter system 1200. Figure 12B shows the catheter system 1200 when the internal tube 1206 is in an extended position. Extension of the internal tube 1206 results in deployment of the working element 1208 at deployment angles that are progressively more acute. A variety of working elements or devices 1208 are deployable using the internal ramp 1204, including typical guide wires, specialized guide wires (see Figure 16 and the associated description herein), fiber optic systems (see Figures 17A and 17B and the associated description herein), RF system components (see Figure 18 and the associated description herein), and IVUS (see Figure 19 and the associated description herein).

In the Drawings:

Please replace Figure 9A with Figures 9AA, 9AB, and 9AC, enclosed herewith.

Please replace Figure 10A with Figures 10AA, 10AB, and 10AC, enclosed herewith.